Applicant: Alpaslan Demir **Application No.:** 10/629,429

ABSTRACT

Method and apparatus for adjusting the frequency of a voltage controlled oscillator (VCO) at a receiver to synchronize the receiver with the transmitter by correlating a synchronization code channel with training sequences to estimate positive and negative offsets which are employed to estimate an error, which is then filtered. The filter output provides voltage controlling the VCO. The same technique may be employed to control a numeric controlled oscillator (NCO).